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STRUCTURAL OUTLINE OF:

- PLURALISM OF CONTEMPORARY
URBARCHITECTURAL DESIGN ↑

by

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GRAPHICAL REPRESENTATION OF THE STRUCTURAL OUTLINE

STRUCTURAL OUTLINE OF:
PLURALISM OF CONTEMPORARY
URBARCHITECTURAL DESIGN

PREFACE

This report represents a sketch of a research plan begun in the autumn of 1979 at the Center for Metropolitan Planning and Research of The Johns Hopkins University in Baltimore. It is at the same time a continuation of several years study of urbarchitecture in a cross-cultural perspective. The ideas contained here have been tested both in my own design projects and in study and conversations with colleges in my country and throughout the world.

Although not limited to a particular audience, this work is intended primarily for those in the field of urbarchitectural practice. Its comprehensive nature is necessitated by the scarcity of relevant material to be found in Croatian.

It is not my intention here to contribute to the new body of knowledge (an undertaking beyond my ability) but rather to concentrate on a structural format into which existing ideas can be organized. It is hoped that such organization will present those who create our physical environment with a greater accessibility to the means to answer the complex questions with which our profession is confronted today.

INTRODUCTION

We need an architecture and urban design that is human, as well as efficient, mindful of historic continuity, as well as technically advanced.

Wolf von Eckardt, 1979

...Human? Nuts. No, the word "human" is one of those words we all agree with, like "motherhood." I'm not against motherhood. Or children! Or honesty! Look! I'm not building for orangutans or elephants. I'm building for people, by the very jobs I get...

Philip Johnson, 1973

It would be fashionable to blame planners and architects for so much brand new environmental pollution. But they have come by their power through the failure of others to be active participants...

I hope to interest social and behavioral scientists and the clients for new environments toward awareness of an involvement in specifying the human properties any new environment is to respond to...

...there is more to be gained from, it is thought, being explicit, stating intentions, searching for irregularities, making measurements, than from pronouncing still another aesthetic manifesto.

Constance Penn, 1970

Nobody these days will believe anything that is spontaneous or artistic. Everything is scientific. Sociologists pretend that sociology is a Wissenschaft, which of course it's not. It's just abracadabra. It is the role of the artist to show what the town should be like. Sociology in architecture is a crutch...

Philip Johnson, 1973

Correlation between urbarchitectural practice and the results of behavioral research either doesn't exist or is inadequate at best. This situation needs to be changed to draw together common elements of environmental psychology, social anthropology, urban sociology and urban design. To achieve this goal, a dialogue must be established between social scientists and designers. The continued growth of interest in establishing such a dialogue among the former is countered by the constant level of doubt among the latter.

True, there does exist a body of research in the field of man-environment studies made by architects. The problem is that those professionalists who attempt to bridge the fields are instead transformed; they are no longer architects (see their bibliographies, or their buildings - if they exist). Thus alienated from their profession, they do not succeed in contributing to the interaction of these disciplines in such a way as to influence urban design practice.

Another negative impetus to synthesizing these fields is the diversity of sources and their widespread dispersal. There have been some attempts to draw this scattered material together. These attempts have resulted in either rather massive volumes (for example see Rapoport) or anthologies of related but disconnected articles (e.g., Jon Lang). The results of these architects-cum-behavioral scientists present the designer with a smorgasbord of information and conclusions, but while the ideas may be good, without a change in the traditional education of urbarchitects, they are not useful. The vocabularies and the ways of thinking behind them are too diverse to permit communication.

The architect-cum-behavioral scientist has become a behavioral scientist who places a heavy emphasis on urbarchitecture. The goal desired here is to produce urbarchitects who will have an awareness and emphasis on the behavioral sciences. What is advocated here is an approach to urbarchitecture and a new emphasis.

Only if the architect avoids becoming infatuated with the field of behavioral science can his efforts of synthesis be useful in urbarchitectural practice. Up to the present time there have been few such attempts. This scarcity of work therefore makes any attempt in this direction worthwhile, even should the results achieved fall short of the desired goal.

The ideas presented here will be as simple as the subject permits. The structure of the study takes a tripartite form. Graphical representation of the structure will be used to help the reader visualize the interaction of sets of items. Each set or subset is selfcontained and may be read independently of any other set, though each set is an integrated part of the whole. There are also two generations of subsets. Short summaries of the material may be found heading each of the 27 members of the first generation of subsets.

This graphic scheme also provides two guides for reading the material. One is a ste-by-step progression for those who have time to read the entire body. The other is for those of more limited time and interest. It is suggested that the latter read the summaries of subsets in order to gain a perspective of the entire problem, and then to concentrate on the items dealing with their particular interest.

In the first of the three sets, architectural philosophies and their embodiment in contemporary urbarchitecture are discussed and critiqued.

The second set deals with urban form, placing emphasis on the behavioral sciences.

In the last part, pluralism of approaches to urban design in a Yugoslav context will be discussed.

An effort has been made to search for the appropriate literature that can serve as a working tool for those architects who agree on the necessity of developing new approaches to urban design. This bibliography is made up of books I have come into contact with or have read in the course of my work and thus reflects an architectural bias. In the course of further study additional emphasis will be placed upon books in the social sciences.

The selected bibliographies presented here is divided under six of nine main headings. Under the three final headings citations are composed primarily of Yugoslav authors, and so these bibliographical data will be completed in Yugoslavia during the next phase of research.

None of the items cited in this bibliography were drawn from professional journals due to the necessity to limit this report.

CHAPTER ONE

URBAN DESIGN -

THEORY AND PRACTICE

IN CROSSCULTURAL PERSPECTIVE

- . urban design philosophies in the second half of the 20th century
- . contemporary urbarchitecture
- , models in urban design process

URBAN DESIGN-THEORY AND PRACTICE IN CROSSCULTURAL PERSPECTIVE

1.1 Urban design philosophies in the second half of the 20th century

1.1.1. theories and approaches to urban design

1111. recent contributions to urban design theory

1112. urbarchitecture in the 1960's and 1970's

1113. urban form in design ideas

Concise and introductory analyses of theoretical considerations are organized in three parts.

In the first part, recent contributions to urban design ideas will be commented upon. The following authors will be cited: Schulz, Zevi, Rasmussen, Rowe, Pevsner, Scully, Mumford, Corbusier, Giedion, Hiberseimer, Hitchcock, Wittkower, Banham, Joedicke, Gropius, Tafuri, Prak, Alexander, Lefebvre, Harvey, Jacobs, Doxiadis, Blumenfeld, Goodman, Ruskin, Sitte.

In the second part, the tumultuous events of the sixties and seventies, presented in the controversial works of young architects, will be discussed. The following authors will be cited: Broadbent, Jencks, Stern, Venturi, Ph. Johnson, R. Krier, Friedman, Eisenman, Graves, R. Smith, Bofil, Ross, Tange, Blake, Honikman, Sterling, Saarinen, Smitsons, Isozaki, Eycke, Erhardt, Giurgola, Hejduk, Cook, Moore.

In the last part, the discussion is related to the most interesting ideas about urban form. The following authors will be cited: Lynch, Appleyard, Bacon, Halprin, Kepes, Cullen, Browne, Burke, Thiel, Rudofsky, Simonds, Brower.

1.1.2. recent approaches to urban design of Yugoslav authors

1121. urban social space

1122. urban form

1123. reconstruction of historic centers

Urban design thought in Yugoslavia lacked systematic organization until recently. The situation is changing, and valuable research is emerging particularly in three fields: urban sociology, urban form, and reconstruction of historic cities.

Until the results of this and other research are implemented, Yugoslav urbarchitecture will continue to be dominated by the international style (which has grown deep roots in the thinking of Yugoslav architects) on the one hand, and on the other, by imported fashion garnered from international journals which monopolize the market of architectural information.

1.1.3. summaries of critiques

1131. traditional critiques of the contemporary city

1132. architectural critiques of modern movement

1133. behavioral critiques of urban design

In all critiques general dissatisfaction is more or less explicitly expressed with the status of urbarchitecture today.

The traditional critique attacks the uncontrolled development of modern metropolis. Preference is instead given to "garden cities," organic architecture, and human scale. These topics will be discussed under the headings: abstract urbarchitecture in modern metropolis, organic urbarchitecture, and "New Towns dream."

Architectural critiques in recent years are devoted to the annihilation of the modern movement, which has dominated architectural theory since the early 1920's. These topics will be discussed under the headings: "complexity and contradiction in architecture," "form follows fiasco," and "collage city." Behavioral critiques with man in mind are scathing toward architects, polluters of the physical environment (who, if we can believe Eckhardt, design 5 percent of the built environment). This critique propagandizes design for people and lays foundations for new design approaches. These topics will be discussed under the headings: limitations in urban design theory today, potential contributions of social sciences and implications for design education.

1.2. Contemporary urbarchitecture

1.2.1. language of modern urbarchitecture

1211. world perspective

1212. European perspective

1213. Yugoslav perspective

Personal research, notes and photographs will be presented in this section. Disparity between the repeatedly stated intentions of modernists and the perception of people who experience the design environment will also be discussed here. The reasons for this disparity will be discussed in later sections.

1.2.2. language of postmodern urbarchitecture

1221. world perspective

1222. European perspective

1223. Yugoslav perspective

While discussing in the previous section the language of modern architecture (which is well known to all architects), we here discuss something far more ambiguous, that area labeled post-modernism. Architectural post-modernism, which exists today more in the writings of its proponents (the Inclusivists) than in actual buildings, is greatly influencing polemics among architects.

1.2.3. "Where are we at now"

1231. world perspective

1232. European perspective

1233. Yugoslav perspective

Pluralism of styles characteristic of the era discussed in previous sections is presented here with numerous examples, ranging from those which are well known to the general public to those which are only recognizable to local professional groups.

1.3. Models in urban design process

1.3.1. decision making processes and urban design

1311. rationality

1312. bound rationality

1313. incrementalism

The theories of decision making suggest ideas which can inspire models in the design process. Information processing technology contributes to their cumulative operability. A short summary of different approaches to decision making will be presented in the introduction of this section in which models of urban design will be discussed.

1.3.2. systems approach

1321. holism and rationality in system ideas

1322. systematizing urban design processes

1323. systems approach examples in urban design

Many urbarchitects and planners, inspired mostly by the work of Christopher Alexander (Notes on the Synthesis of Form), began to use the systems ideas in an attempt to grasp large, complex problems which they are unable to continue handling intuitively. The main dilemma is how to synthesize these nicely solved problems and exhaustively presented plans into form.

1.3.3. pattern language

1331. concept of wholeness of the environment

1332. concept of wholeness of pattern language

1333. concept of evolution of pattern language

The whole section is dedicated to the analysis of Alexander's new theory of architecture and its archetypal language which enables everyone to create independently order and wholeness in environment as well as to comment on experiments through which this theory is implemented.

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CHAPTER TWO

URBAN DESIGN -

BEHAVIORAL APPROACH

- . environmental knowing
- . environmental behavior
- . behavioral research methods

URBAN DESIGN-BEHAVIORAL APPROACH

2.1 Environmental knowing

2.1.1. environmental perception, cognition and evaluation

2111. environmental perception

2112. environmental cognition

2113. environmental evaluation

The prerequisite to any systematic analysis of the interaction between man and his environment is to define the mechanisms which link them.

Beginning by describing the sensory characteristics of people, the following discussion will deal with visual perception in detail, but emphasizing the multimodal aspect of perception too. These topics will be discussed under the headings: multisensory aspects of perception, elements of visual information in the city, movement and perception.

Cultural background, social class, profession, age, etc., all influence the formation of cognitive structures, and so they vary for the same physical environment. These variables will represent the major part of the analysis of cognitive processes. These topics will be discussed under the headings: representation of information, orientation and legibility of urban form, methodological consideration.

At the end of this section, the goal is to present the ways in which people experience and evaluate the city. These topics will be discussed under the headings: the perception of environmental quality (variability of standards, environmental preferences and migration, cultural variability of environmental quality), environmental evaluation in the design process

(the role of value systems in design, preferences in design processes, evaluation of representations and judgment of design ideas), and choosing alternatives.

2.1.2. environmental meaning and symbolism

2121. urban design and semiology

2122. urbarchitectural meaning

2123. expression and symbolism in urban design idea

The analysis of preferences of one environment over another, will be continued by posing the question of meaning and symbolism of urban form. The environment is a form of nonverbal communication. People act depending on how they read the environmental signals. Here an attempt is made to answer if and how the urban environment can be considered as a semiological system. Items included here: environment as communication, function and symbolism of urban environment, cross cultural characteristics of the symbol form; meaning in western architecture, connotative and denotative meaning, metaphor; analysis of symbolism, manipulation of meaning in design process, designing the symbolscape.

2.1.3. formal design in the theory of perception

2131. Gestalt

2132. expressive qualities

2133. principles of formal aesthetics

Here the emphasis is upon value systems and aesthetic judgment. A discussion of proportions, rhythm, repetitions, coherency, and of other

aspects of formal aesthetics will try to explain how the aesthetic potential is created. It was just such questions of expressive factors in formal organization which first attracted the attention of architects to the psychology of perception, and especially toward the Gestalt theory.

2.2 Environmental behavior

2.2.1. physical and sociocultural context

2211. typology, morphology and function of urban space

2212. behavioral settings

2213. public and private domain

The study of psychological processes, that are treated in section 2.1 is the basis for understanding human behavior in the environment. This behavior can be considered as a goal-oriented attempt of the organism to fulfill the need which it perceives and cognitively organizes. The socio-cultural context, by imposing norms and value orientations lead to a particular behavior pattern. Along with detailed analysis of the sociological, psychological and cultural characteristics of different urban surroundings, their reflection in the physical environment is also emphasized. The morphology of urban space is interpreted through two opposing concepts of space - progressive and traditional (F. Choaye).

2.2.2. value systems and life style

2221. value systems and life style of various social groups

2222. constants and variables

2223. value-factors in design space-time organization

One of the problems facing architects today results from the different value systems of designers and the public. This experience teaches us that it is unnecessary to analyze values and life styles of different groups in order to understand the urban forms which their choices create. The discussion in this section will suggest that lifestyle represents one of the crucial factors in physical design.

2.2.3. subjective urban morphology

- 2231. specific cognitive structuring
- 2232. designing for different groups
- 2233. congruence of the objective and subjective morphology

Subjective urban morphology (the subjective environment that affects behavior) is a result of perceptual processes, which have already been discussed. It is different for different groups, and thus it is important to check whether designed elements coincide with specific cognitive structuring of particular groups. The congruence of objective and subjective morphology of a particular group can represent one of the design goals.

2.3. Behavioral research methods

2.3.1. social science technique

- 2311. different types of techniques
- 2312. choice criteria
- 2313. development of new techniques

The selected social science techniques for previously discussed problems are presented here.

Design processes call on different types of social science research, depending on one hand on the design context and on the phase of the design process on the other hand. As design research requires different sets of methodological tools relevant to the various aspects of design, the type of criteria used in choosing them is essential for any productive analysis.

The pluralism of design process today must be accompanied by the development of new techniques.

2.3.2. measuring the visual environment

2321. different types of techniques

2322. graphical methods

2323. representations of sequence experience

Techniques for analyzing and describing visual environment are different. Here, graphical methods of analysis will be discussed in more detail. They are developed in order to describe a certain spatial pattern. The most sophisticated of them are based on symbolizing the elements of sequential experience with the help of two dimensional drawings. In the beginning they are incomprehensible, but by learning how to use them it is possible to imagine the sequential experience in the same way that musicians experience music through notes on a page.

2.3.3. some examples in practice

2331. world perspective

2332. European perspective

2333. Yugoslav perspective

Some examples of how to implement social science techniques in urban and architectural design are selected and presented here. We will also analyze in greater detail some of the random attempts to measure visual experience on an urban and regional scale. Lynch tells us that before 1976 there were 15 such attempts in the U.S.A. The first of these was published about 15 years ago. In the early seventies there were also some isolated attempts in Yugoslavia, especially on the urban level.

2.1. Environmental Knowing

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CHAPTER THREE

TOWARD PLURALISM - ECOLOGICAL APPROACH TO URBAN DESIGN IN YUGOSLAVIA

- . social and physical space in a socialist selfmanagement context
- . ecological approach to urban design in Yugoslavia
- . modeling the design process

. Our interest here is in the ideological context of architecture and urban design, and we submit that they are inseparable from their ideological context...

. By means of an ecological approach to pluralisms of urban design, in a socialist selfmanagement society, we hope to create a theoretical basis for an environment which reflects the social goals of developing a human, open, and free life for everyone...

3. TOWARD PLURALISM - ECOLOGICAL APPROACH TO URBAN DESIGN

3.1. Social and Physical Space in Yugoslav Context

3.1.1. Basic characteristics of socio-cultural and physical context

- 3111. social goals of community development
- 3112. local community
- 3113. environmental variability

3.1.2. Pluralism of contemporary urban form in Yugoslavia

- 3121. environmental identity
- 3122. typology and morphology of urban form
- 3123. function of urban space

3.1.3. Images and symbolism of urban form

- 3131. image of historic and contemporary city
- 3132. meaning and symbolism of city form
- 3133. images in past design ideas

3.2. Ecological Approach to Urban Design

3.2.1. Meaning and urban design in Yugoslavia

- 3211. tradition of physical planning and urban design
- 3212. interrelationship of social and physical planning to urban design
- 3213. contemporary urban design policy

3.2.2. Organization of space, time and meaning in contemporary Yugoslav urbanism

- 3221. new approaches to urban design
- 3222. recent works
- 3223. towards theory

3.2.3. Implementation and evolution of design ideas

3231. urbanization of design ideas implementation

3232. successive studying of newly designed environment

3233. evaluating and perspective future assumption

3.3. Participation in Design Process

3.3.1. Choice criteria in Modeling

3311. general criteria

3312. specific criteria

3313. participation in the choosing

3.3.2. Participation in design process

3321. relationship of professionalist, (client-local community)

3322. problems of participation (subjects-objects)

3323. problems of interdisciplinary collaboration (subject-subject)

3.3.3. Representation of design ideas

3331. graphical representation

3332. verbal representation

3333. development of various techniques

GRAPHICAL REPRESENTATION OF THE STRUCTURAL OUTLINE

